

ENGINEERING STANDARDS UPDATE

[Standards are serious business](#), but this newsletter isn't.

Topics this month:

- **Online Standards Seminar/Pizza Tues, Sept. 11**
- **EDRMS Access**
- **Compressed Gas Association (CGA) Standards Access**
- **Electronic Signatures on Drawings**
- **Report National Standards Work**
- **Concrete Anchors for Nuclear Work**
- **LANL Standards Issued in August**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

The LANL Engineering Standards: <http://engstandards.lanl.gov>

ONLINE STANDARDS SEMINAR/PIZZA TUES, SEPT. 11

From the LANL Research Library:



New to the Lab and need an introduction to finding standards? Or have you been here a while, and want to make the best use of standards-finding tools?

The Research Library will host an IHS Engineering Workbench standards training and pizza lunch on **Tuesday, Sept. 11**, from **11:00am-1:00pm** in the **Oppenheimer Study Center's Cochiti Room** (TA-3, Building 207, 2nd floor).

IHS Markit trainer Travis Miller will provide an overview of searching the Engineering Workbench platform, including enhancements, tips to improve your searching and more. RSVP not required, but for planning purposes please email Kathy Varjabedian, kv@lanl.gov, if you plan to attend.

IHS Engineering Workbench

IHS Engineering Workbench (formerly IHS Standards Expert) is an online system for standards management providing LANL staff access to standards from organizations like ANSI, ASTM, ASME and more. It offers notifications of standards activities and supports creating and sharing lists of frequently used standards. Learn how to make effective use of this resource through this training opportunity. Explore the Research Library's standards collection [here](#).

Admit it, I had you at "pizza."

EDRMS ACCESS

Some have wondered how to get files from the Electronic Document and Records Management System (e.g., many non-CoE procedures, drawings, other tech baseline stuff). Below is how to request for access via an Askit ticket. (Thanks to David Smith).

1. Go to URL: <https://askit.lanl.gov>
2. Search by Keyword at the Looking Glass Icon at the TOP of the screen
3. type in 'EDMS' in the search bar
4. Click on 'Request EDMS Access'
5. Ensure you have purchased a Documentum User License and then choose 'Yes'
6. Choose 'adnhdocs' (or whichever document repository to which you need access)
Note: If you need access to multiple folders you can request the additional folders in the **Comments** area of the Askit request ticket.
7. Access Level: choose 'general user – read only'
8. Provide justification
9. Submit AskIT Ticket
10. When you get access, go to [EDRMS](#). The SI-DC folks in Debi Guffee's group can coach and David Smith in ES-EPD is knowledgeable also.

COMPRESSED GAS ASSOCIATION (CGA) STANDARDS ACCESS

LANL's Compressed Gas Association (CGA) 12 month subscription has been approved and is active per Pressure Safety POC "CPSO" Ari (Ben) Swartz. The subscription service is not available like the standard IHS service. If you or someone you know need a CGA document please contact Ben with the CGA ID number (606-2279, abswartz@lanl.gov). You may search the CGA publications [here](#).

ELECTRONIC SIGNATURES ON DRAWINGS

Recently sent by CAD and Architectural POC Scott Richardson to AutoCAD users and ES-EPD, but with fancy fonts and lowercase proper names like architects tend to do:

There are 2 new AutoCAD templates (.dwt) posted to the CAD Standards Manual [webpage](#) for standard title blocks and title sheets.

These new templates have been designed to accommodate Entrust Digital Signatures for all approvers of drawings and sketches. An active Variance is in place against the CAD Standards Manual Rev 5 to allow use of these templates (the Variance will be voided by the next Rev of the Manual).

At this time, either the conventional title block / title sheet templates or the digital signature title block / title sheet templates may be used, but use only one or the other in a single drawing / sketch package.

Also posted is a new [README file](#) with further instructions for use of any of the templates – please take the time to read it to familiarize yourselves

Questions? Contact Scott Richardson, 606-0596, scr@lanl.gov

REPORT NON-GOVERNMENT STANDARDS WORK

If you're a Lab employee serving on a committee maintaining or writing a national or international code or standard for which I am not aware, please contact me (same when work stops). Examples are ASME, ASTM, ISO, NFPA, etc. Over 50 employees serve on over 150 committees do such work which we must report to DOE-HQ per the contract ([more than any other site](#)). Heroes all, they are:

Randall D. Austin	David P. Fuehne	Paul O. Leslie	Michael W. Salmon
Michael E. Bange	Milan S. Gadd	Robert C. Little	Michelle E. Silva
Luiz Bertelli	Michael (Misha)	Jean-Francois Lucchini	Phillip H. Stauffer
David A. Bingham	Gallegos	Michael W. Mallett	Jacob Stinnett
Kelly L. Bingham	Lloyd B. Gordon	Kattathu J. Mathew	James R. Streit
Amber N. Black	David P. Harvey	Thomas D. McLean	Jared T. Stritzinger
David A.	Vladimir Henzl	Renee A. Mondragon	Ari Ben Swartz
Bruggeman	Jon E. (Rick) Hinckley	Murray E. Moore	Taunia S. Van
Ralph J. Clayton	Patrick W.	William L. Myers	Valkenburg
Paul J. Contreras	Hochanadel	Glen J. Pappas	James Thomas (Tom)
Paula R. Diepolder	Daniel A. Javernick	Donivan R. Porterfield	Voss
Shannan D. Diffey	Benjamin Karmiol	Jose E. Rodriguez	Tom L. Waters
Scott W. Doebling	Douglas D. Kautz	Christopher Romero	Jeffrey J. Whicker
Donald J. Dudziak	Brett R. Krueger	Mark S. Rosenberger	Brandon M. Wilson
David A. Fry	Joel A. Kulesza	Scott R. Salisbury	Ning Zhang
	Richard C. Lee		N3B: Ernest P. Elliott

CONCRETE ANCHORS FOR NUCLEAR WORK

This should be the final installment of this article series. We are very pleased to announce that revision of the LANL standards necessary for installation of the Hilti HDAs is complete! Thanks to a megaton of hard work on the ESM and spec by SME Glen Pappas.

Santino Hinojos in MOF-CM-SE is managing installation training by a Hilti Field Engineer. Several TA-55 craft and Field Engineers located therein took it in August, and now he will take interested design engineers and others space-permitting. Enroll in **HILTI HDA Undercut Anchor Training UTRAIN # 43624** either Oct 24 or Dec 12; both are classroom training at MSL auditorium for 1 hour and optional hands on (or observation of others installing) at Roads & Grounds for 1 hour (transportation down there included). Questions or problems enrolling? shinojos@lanl.gov, 606-0580.

LANL STANDARDS ISSUED IN AUGUST

ESM STD-342-100	
Ch.5 Structural Section III, Nuclear SSCs Design and Analysis Requirements	Replaced Drillco Maxi-Bolt with Hilti HDA in App A and B.
Chapters 2 Fire, Ch 15 Commissioning,	Added Reference: Fire Protection Div of

and 16 Section IBC-IP	Responsibilities for Construction Inspection, r3, 8/8/2018
Ch. 21 Software, Section SOFT-DESIGN	Added Reference: Design Document (SWDD) Example Template. Thanks to SME Paula Diepolder.

Master Specifications STD-342-200	
05 0521R2 Post Installed Concrete Anchors-High Confidence	Replaced Drillco Maxi-Bolt with Hilti HDA.

CAD Standards Manual STD-342-300 (thanks to POC Scott Richardson and Ed Seawalt)	
Digital Signature Title Sheet and Title Block Templates	NEW!!!!
Template Instructions README	Revised

Std Drawings & Details STD-342-400	
Architectural: Exterior Wayfinding ,ST-G2040-4 Sheets 1–9	Updated to comply with ESM Ch. 5 Section II Rev. 10, plus admin changes to new format CAD Std Section 200 Rev. 5. Thanks to Glen Pappas, POC Scott Richardson.

PM PROCEDURE CHANGES

These 350-series APs from PADCAP are applicable to projects subject to [SD350](#), *Project Management for Capital Asset Acquisition and Construction* (e.g., most anything involving capital funding, plus Environmental Programs and also some expense-funded projects over \$50k). Per Crystal Lucero, the APs are in the adpmdocs repository in [EDRMS](#) (like the other PM docs; EDMS is under Top Tools on LANL homepage); if you have access issues, email project-dcrm@lanl.gov.

The following procedure(s) has been revised and issued: **AP-350-303, R2, Constructability (~8/16/18)**

DOE TECHNICAL STANDARDS ACTION

STDs [postings](#) in the past month: None, but on 9/7:

DOE-STD-1111-2018, [Department of Energy Laboratory Accreditation Program Administration](#)

NATIONAL STANDARDS ACTION

LANL's [IHS](#) subscription reports these changes. ESM Ch 1 Section Z10 says "Errata (correct errors) to any document...are mandatory regardless of contract award date or code of record," so errata apply—assuming the standard is part of the project's code of record.

Document number: ACI 318 ERTA
Publication Date: 6/29/2018

Title: Building Code Requirements for Structural Concrete (ACI 318-14) and Commentary (ACI 318R-14)

Type of Change: Errata/Erratum

Document number: ASME B31.1

Publication Date: 7/20/2018

Title: Power Piping

Type of Change: Complete Revision

Document number: NFPA 16

Publication Date: 1/1/2019

Title: Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems

Type of Change: Complete Revision [Note: LANL IBC projects would still use the 2015]

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

It's awful to see injury and worse when people fail to follow good practice in engineering or maintenance. August brought a couple of such events:

[Genoa, Italy bridge collapse](#): One article said "The Genoa bridge collapse was caused by a major flaw in the supporting piles meaning the structure could not support the weight of heavy traffic, engineer Saverio Ferrari claimed." Hard to argue with that. Others blame the Mafia, the EU, pre-seismic design, construction flaws, allowing heavy trucks to use it, or some combination of these factors. Time will tell what killed over 40 people.



Vigo, Spain Boardwalk Collapse: A [USA TODAY](#) article said ‘Enrique Cesar Lopez Veiga, the president of the Vigo port authority, said he suspected the boardwalk, which is supported by concrete pillars, had a structural problem...He told Cadena Ser radio that it collapsed "probably because of excessive weight" on it.’ Guessing he’s not an engineer, but sounds right...with over 300 injured.



DEDICATION

This Update is dedicated to Pat Gallagher, a manager in Pollution Prevention that helped usher in some sustainable design aspects of the LANL Standards several years back. A story on Pat appeared in LANLtoday on August 10; [that full story](#) is here.

Patricia Gallagher awarded posthumously by DOE for environmental work



Pat Gallagher's early efforts to improve energy, water and resource consumption at the Lab ran into resistance due to aging infrastructure and outdated building standards. However, Gallagher

persisted, working with the Lab's Engineering Standards Group (P342) and enabling several workers to attend specialized training to overcome these obstacles...

LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "Monthly Update" on the Standards homepage. Last month's topics:

- Training & Qual
- LANL Building Code—UMC and UPC 2015 Adoption, NFPA 101-2015
- Concrete Anchors for Nuclear Work—Correction and Update
- Engineering Processes Changes
- LANL Standards Issued in July
- DOE Directives and Technical Standards Action
- National Standards Action
- When Good Conduct of Engineering Isn't Followed

The views expressed in this email are not necessarily those of my employer.
To request a change to this newsletter's distribution, please contact me.

Tobin Oruch, Engineering Standards Mgr
Los Alamos Nat'l Lab, Conduct of Eng Program Office
(505) 665-8475 oruch@lanl.gov <http://engstandards.lanl.gov/>
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